Abstract

The use of an intensity spectrum as a fingerprint to determine the layer structure of a semiconductor wafer product or partial product, thereby to determine the routing history of the product through a production line and prevent routing errors. Also, a production line having a plurality of successive stages for construction of a product such as a semiconductor wafer, and routers for transferring partly constructed product between the stages such that each stage receives a respective predefined partly constructed product as its input. The production line comprises: a predetermined intensity spectrum for at least one stage representing the respective part construction for the stage, an intensity spectrum deriver located at said at least one stage operable to obtain intensity spectra of incoming partly constructed product, and a comparator, for comparing said obtained intensity spectra with said predetermined intensity spectrum, to determine whether said incoming partly constructed products correspond with said respective predefined part construction for the stage.